

### Amendments to the Claims

1. (Currently Amended) A method for identifying a candidate modulatory compound ~~that is capable of~~ for decreasing the expression or activity of a *daf-16* gene, said method comprising:

(a) providing a *C. elegans* or ~~nematode~~, isolated *C. elegans* ~~nematode~~ cell ~~, or isolated mammalian cell~~ expressing a *daf-16* gene; and

(b) contacting said a *C. elegans* or ~~nematode~~, isolated *C. elegans* ~~nematode~~ cell ~~, or isolated mammalian cell~~ with a candidate compound, wherein a decrease in *daf-16* expression or activity following contact of said *C. elegans* ~~nematode~~, or said isolated *C. elegans* ~~nematode~~ cell ~~, or said isolated mammalian cell~~ with said candidate compound ~~identifying~~ identifies a candidate modulatory compound.

2. (Original) The method of claim 1, wherein said compound is a candidate compound for ameliorating or delaying an impaired glucose tolerance condition, atherosclerosis, or obesity.

3. (Cancelled)

4. (Original) The method of claim 1, wherein said *daf-16* gene is a nematode *daf-16* gene.

5. (Withdrawn) A method for the identification of a compound that is a candidate compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising the steps of:

(a) providing a *daf-2*, *daf-16* mutant nematode;

(b) expressing in the cells of said nematode a mammalian AFX polypeptide, whereby said nematode forms a dauer larva; and

(c) contacting said dauer larva with a compound, wherein release from the dauer larval state is an indication that said compound is a candidate compound for ameliorating or delaying an impaired glucose intolerance condition.

6. (Withdrawn) A method for the identification of a compound that is a candidate compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising the steps of:

(a) providing an *age-1*, *daf-16* mutant nematode;

(b) expressing in the cells of said nematode a mammalian AFX polypeptide, whereby said nematode forms a dauer larva; and

(c) contacting said dauer larva with a compound, wherein release from the dauer larval state is an indication that said compound is a candidate compound for ameliorating or delaying an impaired glucose intolerance condition.

7. (Withdrawn) A method for the identification of a compound that is a candidate compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising the steps of:

- (a) providing a *daf-2*, *daf-16* mutant nematode;
- (b) expressing in the cells of said nematode a mammalian FKHR polypeptide, whereby said nematode forms a dauer larva; and
- (c) contacting said dauer larva with a compound, wherein release from the dauer larval state is an indication that said compound is a candidate compound for ameliorating or delaying an impaired glucose intolerance condition.

8. (Withdrawn) A method for the identification of a compound that is a candidate compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising the steps of:

- (a) providing an *age-1*, *daf-16* mutant nematode;
- (b) expressing in the cells of said nematode a mammalian FKHR polypeptide, whereby said nematode forms a dauer larva; and
- (c) contacting said dauer larva with a compound, wherein release from the dauer larval state is an indication that said compound is a candidate compound for ameliorating or delaying an impaired glucose intolerance condition.

9. (Withdrawn) The method of any of claims 5-8, wherein said nematode is *C. elegans*.

10. (Withdrawn) The method of any of claims 5-8, wherein said compound is a candidate compound for ameliorating or delaying an impaired glucose tolerance condition that involves obesity or atherosclerosis.

11. (Withdrawn) A method for identifying a compound that modulates the interaction between DAF-16 and a second DAF polypeptide, said method comprising the steps of :

- (a) providing a DAF-16 polypeptide;
- (b) providing a second DAF polypeptide;
- (c) allowing said DAF-16 polypeptide and said second DAF polypeptide to interact and form a complex;

- (c) contacting said complex with a candidate compound, a modulation in the interaction between said DAF-16 and said second DAF polypeptide identifying a modulatory compound.

12. (New) The method of claim 1, wherein said *daf-16* gene has at least 71%

amino acid sequence identity to SEQ ID NO:54.

13. (New) The method of claim 1, wherein said *daf-16* gene is a human gene.

14. (New) The method of claim 13, wherein said human gene is AFX.

15. (New) The method of claim 13, wherein said human gene is FKHR.